

REMARKS

In response to the Office Action mailed on January 29, 2004, claims 1-25 are pending in this application. Claims 21-25 stand withdrawn.

§112 Rejection of the Claims

Claims 1-8, 10-14, and 16-20 were rejected under 35 USC § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention.

The Office Action states that Claims 1 and 10 of generating the electric field in association with an atrial or ventricular depolarization appears to be in conflict with claims 5 and 18 and of generating the electric field after depolarization. Applicant respectfully traverses the rejection because the claims are not in conflict.

Claim 1 recites, among other things, wherein generating the electrical field includes outputting a non-excitatory electrical field in association with an atrial or ventricular depolarization such that the electrical field does not interfere with the heart rhythm. The present application teaches that one way to associate a non-excitatory electrical field with a depolarization is to generate the field after the depolarization. This teaching, among other things, is incorporated in the claims by reading claim 5 with claim 1. Reading claim 18 with 10 operates similarly. Applicant respectfully submits that claims 1 and 10 are not in conflict with claims 5 and 18, and Applicant respectfully requests reconsideration and allowance of claims 1-8, 10-14, and 16-20.

Request for Clarification of the Bases of Rejection

The Office Action expressly states that it is using the combination of Chekanov and Hauck in rejecting claim 9. However, the Office Action then discusses additional rejections for claims 1, 4, 5, 10, 18 and 20 as well using only this combination (*see* Office Action section 3).

Also, the Office Action expressly states that it using the combination of Chekanov, Hauck and Dev in rejecting claims 1-8, and 10-20. However, the Office Action only discusses rejections to claims 2, 6, 7, 12, 14 and 17 in relation to this proposed combination (*see* Office Action section 4).

Applicant requests clarification of which references are relied on in rejecting the specific claims in the next official communication.

Further, Applicant is unable to find a statement of reasons for the rejections under of claims 3 and 11 as required under 37 C.F.R. § 1.104(4)(c)(2) and as suggested in MPEP 706.02(j). Applicant respectfully requests clarification of the bases of the rejections or, in the alternative, withdrawal of the rejections and allowance of claims 3 and 11.

§103 Rejection of the Claims

Claim 9 was rejected under 35 USC § 103(a) as being unpatentable over Chekanov (U.S. Patent No. 6,201,991) in view of Hauck (U.S. Patent No. 6,560,489). Applicant respectfully traverses the rejection.

The Office Action fails to establish proper *prima facie* obviousness because the proposed combination of documents does not suggest the desirability of the combination.

Hauck refers to tissue remodeling, and does not appear to discuss treatment of plaque formation in blood vessels. Chekanov refers to a device to prevent or decrease plaque formation in blood vessels and teaches away from non-muscle-stimulating electrical energy by reference to using its device to stimulate muscle contraction (*see* Chekanov col.2 lines 61-62, col.3 lines 42 - 49). Because Hauck refers to tissue remodeling and because Chekanov refers to plaque removal and teaches away from non-stimulating electric energy, Applicant submits that motivation is lacking to combine Hauck and Chekanov.

Also, the proposed modification can not render references unsatisfactory for their intended purpose. MPEP § 2143.01. Hauck refers to preventing the level of current from inducing unwanted heart depolarizations (Abstract). Because Chekanov refers to using its device to stimulate muscle contractions, the proposed combination of Chekanov with Hauck would render the device in Hauck unsatisfactory for this purpose.

Therefore, because motivation is lacking to combine Chekanov with Hauck, Applicant respectfully requests reconsideration and allowance of claim 9.

Claims 1-8 and 10-20 were rejected under 35 USC § 103(a) as being unpatentable over Chekanov (U.S. Patent No. 6,201,991) in view of Hauck (U.S. Patent No. 6,560,489) and further in view of Dev et al. (U.S. Patent No. 6,347,247, "Dev").

At least for the reasons discussed previously, Applicant submits that motivation is lacking to combine Chekanov with Hauck. Applicant further submits that motivation is lacking to combine Dev with Chekanov and Hauck because the references do not suggest the desirability of the combination.

Applicant can not find where Dev teaches or suggests using electric fields to prevent plaque build-up. Dev teaches a device that dilates a vessel, and discusses denuding of cells that comprise a blood vessel that is independent of the applied electrical parameters (*see* Dev, col. 6 lines 42-63). Because the blood vessel is not comprised of the plaque, the cited portions of Dev do not discuss preventing plaque build-up in an artery. Also, because the denuding is not accomplished by electrical impulses (*see* Dev col. 6 lines 42-49), the cited portions of Dev do not discuss preventing plaque build-up in an artery using an electric field. Accordingly, proper motivation is lacking to combine Dev with Chekanov.

Also, Applicant can not find where Dev teaches or suggests applying current to heart tissue as discussed in Hauck, nor can Applicant find where Hauck discusses dilating blood vessels as discussed in Dev. Accordingly, proper motivation is lacking to combine Dev with Hauck.

In addition, to establish proper *prima facie* obviousness, the references must teach or suggest all claim elements. Applicant is unable to find in the applied documents, wherein providing the lead includes positioning the lead into a vein adjacent the coronary artery, as recited in claim 3. Also, Applicant is unable to find, among other things, wherein generating the electrical field includes generating the field after heart depolarization as recited in claims 5 and 18. Further, Applicant is unable to find, wherein one of the two leads is adaptable to be positioned in an anterior vein and a second of the two leads is adaptable to be positioned in a lateral vein, and the electrical field is a non-heart-excitatory signal passing through a left marginal artery and an anterior interventricular artery, as recited, among other things, in claim 15.

Applicant respectfully requests reconsideration and allowance of claims 1-8 and 10-20.

Conclusion

Applicant respectfully submits that the claims are in condition for allowance, and notification to that effect is earnestly requested. The Examiner is invited to telephone Applicant's attorney at (612) 349-9587 to facilitate prosecution of this application.

If necessary, please charge any additional fees or credit overpayment to Deposit Account No. 19-0743.

Respectfully submitted,

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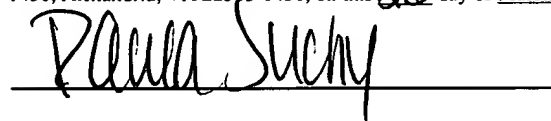
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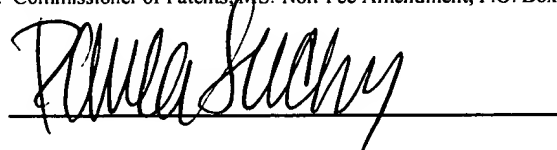
By


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CERTIFICATE UNDER 37 CFR 1.8: The undersigned hereby certifies that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail, in an envelope addressed to: Commissioner of Patents, MS: Non-Fee Amendment, P.O. Box 1450, Alexandria, VA 22313-1450, on this 26 day of March, 2004.



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